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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,458	04/16/2001	Majid Anwar	PGLD-P01-003	7727
28120	7590	11/15/2005	EXAMINER	
FISH & NEAVE IP GROUP ROPES & GRAY LLP ONE INTERNATIONAL PLACE BOSTON, MA 02110-2624			LESPERANCE, JEAN E	
			ART UNIT	PAPER NUMBER
			2674	

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/835,458

**Applicant(s)**

ANWAR, MAJID

**Examiner**

Jean E Lesperance

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on August 31, 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-18,22,23 and 32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-18,22,23 and 32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. The amendment with the request for continuation examination filed August 31, 2005 is entered and claims 1-3, 5-18, 22 , 23 and 32 are pending.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-3, 5-18, 22 , 23 and 32 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-18, 22 , 23 and 32 are rejected under 35 USC 103 (a) as being unpatentable over US Patent # 6,717,573 ("Shahoian et al.") in view of US Patent #6,525,749 ("Moran et al.").

As per claim 1, Shahoian et al. teach a computer device having a system for simulating tactile control over a document (a haptic feedback mouse interface system 10 of the present invention capable of providing input to a host computer and capable

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of providing haptic feedback to the user of the mouse system. Mouse system 10 includes a mouse 12 and a host computer 14 (column 4, lines 27-31)), comprising:

a host computer Fig.1 (14) which includes a processor, memory, and a display; system code stored within the memory and adapted to be executed by the processor to provide a digital representation of a document including data content and a page structure representative of a page layout of the document (host computer system 14 preferably includes a host microprocessor 100, a clock 102, a display screen 26, and an audio output device 104. The host computer also includes other well known components, such as random access memory (RAM), read-only memory (ROM), and input/output (I/O) electronics (not shown) and Fig.1 (26));

an engine for rendering an image of at least a portion of the page layout of the digital representation on the display (Fig.8 (26) (see portion of pages 404 and 406),

a plurality of user-interface commands (mouse 12 preferably includes one or more buttons 16a and 16b to allow the user to provide additional commands to the computer system (column 4, lines 43-45)), and

a navigation module for navigating through the digital representation of the document by changing the rendered portion of the page layout in response to an identification by the interface process of one of the plurality of user interface commands (if the mass is rotated quickly enough and/or if the inertial forces on the housing are of high enough magnitude, the mouse may be moved or vibrated along the y-axis and the portion of the forces output in the y-axis may cause a controlled object, such as a displayed cursor, to change its y position in a graphical environment in

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response to motor activation (column 11, lines 8-14)) and (mouse 12 preferably includes one or more buttons 16a and 16b to allow the user to provide additional commands to the computer system (column 4, lines 43-45)). Accordingly, the prior art teaches all the claimed limitations with the exception of providing a display monitor for detecting an input stroke traced on the display by a user, wherein the input stroke has a display location and a shape,

an interface process for identifying an input by a user of a user interface command by comparing the shape of the detected input strokes, the identifying being independent of the display location of the input stroke in relation to the location of other visible elements on the display; and

a plurality of command strokes having corresponding shapes, wherein at least one command stroke corresponds to one of the plurality of the user interface commands.

However, Moran et al. teach a display monitor for detecting an input stroke traced on the display by a user, wherein the input stroke has a display location and a shape (the user may draw a gesture on the drawing surface 14 at user action FIG. 83. At block 84, the system then detects that a gesture is entered and performs an analysis on the shape of the gesture to categorize it as one of the gestures known to the system (column 11, lines 27-30)),

an interface process for identifying an input by a user of a user interface command by comparing the shape of the detected input strokes, the identifying being independent of the display location of the input stroke in relation to the location of other

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visible elements on the display and a plurality of command strokes having corresponding shapes, wherein at least one command stroke corresponds to one of the plurality of the user interface commands (receive data information or command gestures that are drawn as a stroke on drawing surface 14, and interpret the individual stroke as a command gesture in response to some action taken by the user. Such an action may be exerting pressure on a button located near the grasping portion of the stylus 42. There are other means available to instruct the system to interpret a stroke as a command. However, for purposes described herein it is assumed that the system is able to interpret a stroke as a command gesture when the user desires. (2)

Operation Assignment 56; Once command gesture(s) is/are issued by the user, the system scans the program memory to determine the operation or operations assigned to that/those gestures, declare and determine a type of structural model in accordance with the gestures; and (3) Operation Implementation 58; means for executing or performing that operation or operations with respect to the desired data (column 8, lines 63-67 and column 9, lines 1-13)).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize the gesture as taught by Moran in the haptic mouse disclosed by Shahoian because this would provide a system including a data interface surface and user controllable means for generating information on said surface.

As per claim 2, Shahoian et al. teach a common human computer interface devices used for such interaction include a stylus (column 1, lines 29-31) corresponding to the display comprises a touch sensitive screen

As per claim 3, Shahoian et al. teach a cursor control Fig.8 (400) corresponding to the display comprises a display screen capable of depicting, a cursor and wherein the input stroke is traced by the cursor.

As per claim 5, Shahoian et al. teach the processor, memory, and display are arranged as a data processing platform for a device selected from the group consisting of a hand-held computer, a telephone, a mobile data terminal, a set top box, an embedded processor, a notebook computer, a computer workstation, a printer, a copier, a facsimile machine, an in-car system, a domestic appliance, an audio player, a microwave oven, a washing machine, and a refrigerator (a host computer Fig.1 (14)).

As per claim 6, Shahoian et al. teach a velocity detector for determining a velocity vector associated with the identified detected input stroke (haptic feedback can also be output to the user to confirm the pressing of a key or a button by the user. When an icon or other object is dragged by the cursor, a sensation of icon weight can be implemented as a vibration tone where the tone frequency indicates weight of selected object (column 20, lines 34-39)).

As per claim 7, Shahoian et al. teach means for applying a velocity characteristic to an identified user interface command (haptic feedback can also be output to the user to confirm the pressing of a key or a button by the user. When an icon or other object is dragged by the cursor, a sensation of icon weight can be implemented as a vibration

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tone where the tone frequency indicates weight of selected object (column 20, lines 34-39)).

As per claim 8, Shahoian et al. teach the means for applying a velocity characteristic includes means for causing the rendered image to move across the screen-display at a velocity associated with the determined velocity vector (haptic feedback can also be output to the user to confirm the pressing of a key or a button by the user. When an icon or other object is dragged by the cursor, a sensation of icon weight can be implemented as a vibration tone where the tone frequency indicates weight of selected object (column 20, lines 34-39)).

As per claims 9, Shahoian et al. teach the plurality of user interface commands includes a command for flipping a page of a document (the user can control the cursor 400 to select and/or manipulate graphical objects and information in the graphical user interface (column 19, lines 59-62)).

As for claim 10, the command for flipping a page causes the rendering engine to render the alternate page within the page layout of the digital representation of the document (the user can control the cursor 400 to select and/or manipulate graphical objects and information in the graphical user interface (column 19, lines 59-62)).

As per claim 11, Shahoian et al. teach an input device selected from the group consisting of a touch sensitive display, a touch-pad, a joystick, a mouse, a trackball and a thumb wheel device (a haptic feedback mouse interface system 10 of the present invention capable of providing input to a host computer and capable of providing haptic feedback to the user of the mouse system Fig.1 (12)).

As per claim 12, Shahoian et al. teach the command for flipping a page causes the navigation module to rendering another portion of the page layout adjacent a currently rendered portion (the user can control the cursor 400 to select and/or manipulate graphical objects and information in the graphical user interface (column 19, lines 59-62)).

As per claim 13, Shahoian et al. teach the interface process includes a page-flip detector capable of responding to the detected movement and wherein the page-flip detector includes means for causing the rendering engine to render an alternate page within the page layout of the digital representation of the document and wherein the navigation module responds to the page-flip detector by rendering another portion of the page layout adjacent a currently rendered portion and wherein the other rendered portion of the page layout has a selected adjacency to the currently rendered portion (Fig.8 (26) includes graphical object interface of pages where the haptic feedback mouse of the present invention can provide tactile sensations that make interaction with those graphical objects more compelling (column 19, lines 27-29)).

As per claim 14, Shahoian et al. teach Fig.8 (26) corresponding to wherein the navigation module includes a page curl detector for rendering, adjacent a currently rendered portion, another portion of the page layout representative of a portion of an underlying page and wherein the other rendered portion of the page layout has a selected adjacency to the currently rendered portion.

As per claim 15, Shahoian et al. teach the navigation module includes a page curl detector for rendering, adjacent a currently rendered portion, another portion of the

page layout representative of a portion of an underlying page and wherein the other rendered portion of the page layout has a selected adjacency to the currently rendered portion (Fig.8 (26)).

As per claim 16, Shahoian et al. teach a plurality of user interface commands includes a command for selecting a portion of the page layout to be rendered (the user can control the cursor 400 to select and/or manipulate graphical objects and information in the graphical user interface (column 19, lines 59-62)).

As per claim 17, Shahoian et al. teach a plurality of user interface commands includes a command includes a command for altering data content of the digital representation of the document (the user can control the cursor 400 to select and/or manipulate graphical objects and information in the graphical user interface (column 19, lines 59-62), See fig.8).

As per claim 18, Shahoian et al. teach a plurality of user interface commands includes a command includes a command for changing a scale of the display (Animations can show a window that has been "pushed" into the background as spinning into the screen and away. The inertial sensation can be a resistive force on the button and can be related to window size or other characteristics of the window. Again, a low-resolution position sensor is desirable to sense the position of the button in its degree of freedom (column 22, lines 25-29)).

As per claim 22, Moran et al. teach the plurality of commands includes a command for controlling a transparency characteristic of a document presented on the display (a transparent pressure sensitive type drawing surface. 14, i.e., touch panel, is

attached onto the surface of CRT display 12. Drawing surface 14 is touched by a user and the touch is detected by touch detection circuit 18 (column 8, lines 10-13)).

As per claim 23, Moran et al. teach the command for controlling a transparency characteristic of selected portions of the document adjusts the visibility of the selected portions relative to other portions of the document (The user can shift the items to adjust the indentation levels. An outline subtree is the combination of an item and all items below it that have greater indentation levels. Subtrees can be collapsed to show the higher level structure of an outline. Collapsed subtrees are physically shrunk (in the vertical dimension only) so that they appear as thin physical lines, termed container objects, underneath the topmost items in the subtrees. Container objects can be expanded back to their original size (column 14, lines 49-57)).

As for claim 32, Moran et al. teach at least one of the plurality of command strokes has a corresponding direction (the simple task of moving an item in a list can be tedious (move a segment of the list to make space for the item at the new location, move the item, close up the old space). This almost always takes too much time for users to actually perform (column 2, lines 46-50)); and

identifying the input of a user interface command includes comparing a direction of the input stroke to the direction corresponding to at least one command stroke (the system identifies the local objects that will be affected by the operation with respect to the structural model. The system at this point operates by grouping strokes into structures (e.g., line items) and partitioning a set of strokes relative to those structures. For example, to move a line item, the system must identify what strokes belong to the

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line item, identify the line items at the destination (to determine the inter-line gap), and partition the remaining strokes on the screen according to whether they are above or below the source line and above or below the destination gap (column 10, lines 14-24)).

#### Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Lesperance whose telephone number is (571) 272-7692. The examiner can normally be reached on from Monday to Friday between 10:00AM and 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Patrick Edouard, can be reached on (571) 272-7603.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(571) 273-8300 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology Center 2600 Customer Service Office Whose telephone number is (703) 306-0377.

Jean Lesperance

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A handwritten signature in cursive script, appearing to read "Sean", followed by a horizontal line and a small flourish.

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Date 10/31/2005

A handwritten signature in cursive script, appearing to read "Patrick N. Edouard".  
**PATRICK N. EDOUARD**  
**SUPERVISORY PATENT EXAMINER**